



AMENDMENT UNDER 37 C.F.R. § 1.116  
U.S. Appln. No. 10/662,825

### **AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

#### **LISTING OF CLAIMS:**

1. (previously presented): A biochemical analysis unit, comprising:
  - i) a base plate, which has a plurality of holes and is constituted of a material having radiation attenuating properties and/or light attenuating properties, and
  - ii) a porous adsorptive material, which is filled in each of the plurality of the holes of the base plate and forms each of a plurality of adsorptive regions,  
wherein the porous adsorptive material, which forms each of the plurality of the adsorptive regions, has a pore diameter falling within the range of 1 $\mu$ m to 10 $\mu$ m, and  
wherein the biochemical analysis unit utilizes a chemical luminescence technique.
2. (original): A biochemical analysis unit as defined in Claim 1 wherein the porous adsorptive material takes on the form of a film.
3. (original): A biochemical analysis unit as defined in Claim 1 wherein the porous adsorptive material, which forms each of the plurality of the adsorptive regions, has a pore diameter falling within the range of 1 $\mu$ m to 5 $\mu$ m.
4. (original): A biochemical analysis unit as defined in Claim 2 wherein the porous adsorptive material, which forms each of the plurality of the adsorptive regions, has a pore diameter falling within the range of 1 $\mu$ m to 5 $\mu$ m.

5. (original): A biochemical analysis unit as defined in Claim 3 wherein the porous adsorptive material, which forms each of the plurality of the adsorptive regions, has a pore diameter falling within the range of  $2\mu\text{m}$  to  $4\mu\text{m}$ .

6. (original): A biochemical analysis unit as defined in Claim 4 wherein the porous adsorptive material, which forms each of the plurality of the adsorptive regions, has a pore diameter falling within the range of  $2\mu\text{m}$  to  $4\mu\text{m}$ .

7. (previously presented): A biochemical analysis unit as defined in Claim 1 wherein the radiation attenuating properties or the light attenuating properties of the material constituting the base plate is such that a radiation or a light having passed through a wall of one hole of the plurality of holes of the base plate reduces to an intensity of at most  $1/5$  of the original intensity when the radiation or the light passes to an adjacent hole.

8. (previously presented): A biochemical analysis unit as defined in Claim 7 wherein the radiation attenuating properties or the light attenuating properties of the material constituting the base plate is such that a radiation or a light having passed through a wall of one hole of the plurality of holes of the base plate reduces to an intensity of at most  $1/10$  of the original intensity when the radiation or the light passes to an adjacent hole.

9. (previously presented): A biochemical analysis unit as defined in Claim 1 wherein the base plate has a mean density of at least  $0.6\text{ g/cm}^3$ .

10. (previously presented): A biochemical analysis unit as defined in Claim 9 wherein the base plate has a mean density within the range of  $1 \text{ g/cm}^3$  to  $20 \text{ g/cm}^3$ .

11. (previously presented): A biochemical analysis unit as defined in Claim 1 wherein the base plate has a thickness within the range of  $50 \text{ }\mu\text{m}$  to  $1,000 \text{ }\mu\text{m}$ .

12. (previously presented): A biochemical analysis unit as defined in Claim 1 wherein each of the plurality of the holes has an area of opening within the range of  $0.001 \text{ mm}^2$  to  $1 \text{ mm}^2$ .

13. (previously presented): A biochemical analysis unit as defined in Claim 12 wherein each of the plurality of the holes has an area of opening within the range of  $0.001 \text{ mm}^2$  to  $0.3 \text{ mm}^2$ .

14. (previously presented): A biochemical analysis unit as defined in Claim 1 where a pitch of the plurality of holes falls within the range of  $0.05 \text{ mm}$  to  $3 \text{ mm}$ .

15. (previously presented): A biochemical analysis unit as defined in Claim 1 where a spacing between two adjacent holes of the plurality of holes falls within the range of  $0.01 \text{ mm}$  to  $1.5 \text{ mm}$ .

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16. (previously presented): A biochemical analysis unit as defined in Claim 1 where an array density of the plurality of holes falls within the range of at least 10 holes/cm<sup>2</sup> to 100,000 holes/cm<sup>2</sup>.

17. (currently amended): A biochemical analysis unit as defined in Claim 1 where the porous adsorptive material includes a porous ~~quality~~ material, a fiber material, and a combination of the porous ~~quality~~ material and the fiber material.

18. (previously presented): A biochemical analysis unit as defined in Claim 1 having a signal to noise ratio greater than or equal to 216.

19. (previously presented): A biochemical analysis unit as defined in Claim 1 having a signal greater than or equal to 1,888,000.

20. (previously presented): A biochemical analysis unit as defined in Claim 1 having a background noise less than or equal to 9,430.